

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

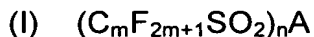
1.-12. (Canceled)

13. (New) A process for preparing functionalized polyorganosiloxane (POS) resins comprising units M: $(R_3SiO_{1/2})$, Q: $(SiO_{4/2})$ and M': $(Y_aR_{3-a}SiO_{1/2})$ and optionally D: $(R_2SiO_{2/2})$ and/or D': $(RYSiO_{2/2})$ and T: $(RSiO_{3/2})$ and/or T': $(YSiO_{3/2})$, wherein:

the radicals R, which are identical or different, represent C_1 - C_{10} alkyl or C_8 - C_{12} aryl; and

the radicals Y, which are identical or different, represent a functional group Y; said process comprising redistributing POS resins with POSf bearing functional units M' and/or D' and/or T', as defined above, in the presence of an acid catalyst, wherein:

at least one catalyst has formula (I) below:



wherein:

m is an integer greater than or equal to 1;

n is an integer equal to 1 or 2 and A represents OH, NH₂, NH or CH₂ with:

- (i) n = 1 and A = OH; or
- (ii) n = 1 and A = NH₂ or NHR with R being a radical of SO₂-Z type, with Z being a group other than C_mF_{2m+1}; or

- (iii) n = 2 and A = NH;

and wherein said catalyst is in the presence of a nonbasic inert filler.

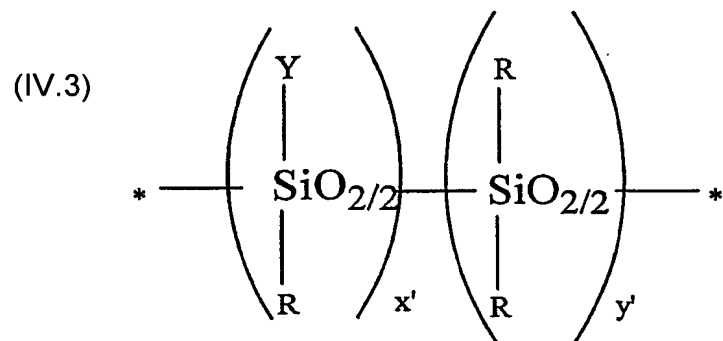
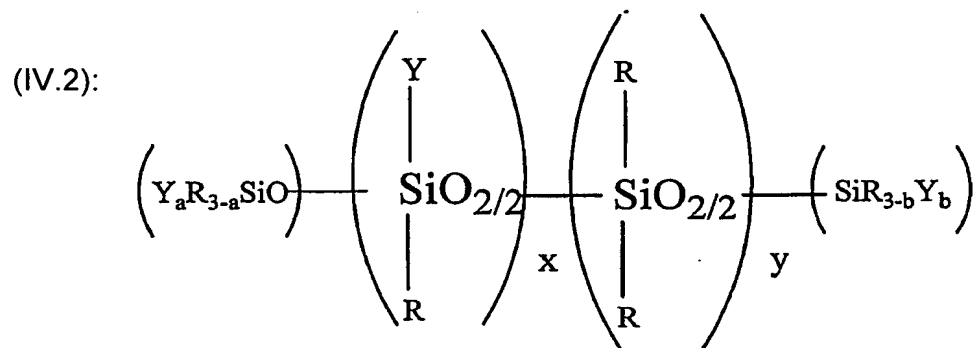
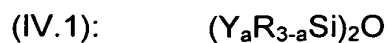
14. (New) The process as claimed in Claim 13, wherein the nonbasic inert filler is carbon black, a diatomaceous earth, or an acidic or neutral oxide, or a mixture thereof.

15. (New) The process as claimed in Claim 14, wherein the acidic or neutral oxide is Al₂O₃, Na₂O, TiO₂, MgO, silica or zeolite, or a mixture thereof.

16. (New) The process as claimed in Claim 13, wherein Y is hydrogen, alkenyl, alkynyl, aryl, (alkyl)epoxy, ether, polyether, carboxylic acid, amide, amine, halide, alcohol, or thiol or other sulfur derivative.

17. (New) The process as claimed in Claim 16, wherein Y is phenyl.

18. (New) The process as claimed in Claim 13, wherein the POSfs bearing functional units M' and/or D' and/or T' have the formula (IV.1), (IV.2) or (IV.3) below:



wherein:

Y and R are as defined in Claim 13;

a and b = 0 to 2;

$0 \leq x \leq 200$;

$0 \leq y \leq 200$;

with the condition that if $x + y = 0$, then a and/or b $\neq 0$;

$1 \leq x' \leq 10$;

$0 \leq y' \leq 10$; and

$3 \leq x' + y' \leq 10$.

19. (New) The process as claimed in Claim 18, wherein the nonbasic inert filler is carbon black, a diatomaceous earth, or an acidic or neutral oxide, or a mixture thereof.

20. (New) The process as claimed in Claim 18, wherein Y is hydrogen, alkenyl, alkynyl, aryl, (alkyl)epoxy, ether, polyether, carboxylic acid, amide, amine, halide, alcohol, or thiol or other sulfur derivative.

21. (New) The process as claimed in Claim 20, wherein the nonbasic inert filler is carbon black, a diatomaceous earth, or an acidic or neutral oxide, or a mixture thereof.

22. (New) The process according to Claim 18, wherein:

$$0 \leq x \leq 50;$$

$$0 \leq y \leq 50;$$

$$1 \leq x' \leq 8;$$

$$0 \leq y' \leq 3; \text{ and}$$

$$x' + y' = 3, 4 \text{ or } 5.$$

23. (New) The process as claimed in Claim 22, wherein the nonbasic inert filler is carbon black, a diatomaceous earth, or an acidic or neutral oxide, or a mixture thereof.

24. (New) The process as claimed in Claim 22, wherein Y is hydrogen, alkenyl, alkynyl, aryl, (alkyl)epoxy, ether, polyether, carboxylic acid, amide, amine, halide, alcohol, or thiol or other sulfur derivative.

25. (New) The process as claimed in Claim 24, wherein the nonbasic inert filler is carbon black, a diatomaceous earth, or an acidic or neutral oxide, or a mixture thereof.

26. (New) The process as claimed in Claim 13, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

27. (New) The process as claimed in Claim 14, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

28. (New) The process as claimed in Claim 16, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

29. (New) The process as claimed in Claim 18, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

30. (New) The process as claimed in Claim 19, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

31. (New) The process as claimed in Claim 20, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

32. (New) The process as claimed in Claim 21, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

33. (New) The process as claimed in Claim 22, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

34. (New) The process as claimed in Claim 23, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

35. (New) The process as claimed in Claim 24, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

36. (New) The process as claimed in Claim 25, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

37. (New) The process as claimed in Claim 13, wherein the concentration of acid catalyst (I) is between 1 ppm and 2% by weight relative to the starting resin and wherein the catalyst (I)/inert support mass ratio is between 0.1 and 10.

38. (New) The process as claimed in Claim 37, wherein the inert support is carbon black.

39. (New) The process as claimed in Claim 37, wherein the catalyst (I)/inert support mass ratio is of the order of 1.

40. (New) The process as claimed in Claim 39, wherein the inert support is carbon black.

41. (New) The process as claimed in Claim 37, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

42. (New) The process as claimed in Claim 41, wherein the inert support is carbon black.

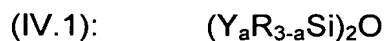
43. (New) The process as claimed in Claim 37, wherein Y is hydrogen, alkenyl, alkynyl, aryl, (alkyl)epoxy, ether, polyether, carboxylic acid, amide, amine, halide, alcohol, or thiol or other sulfur derivative.

44. (New) The process as claimed in Claim 43, wherein the inert support is carbon black.

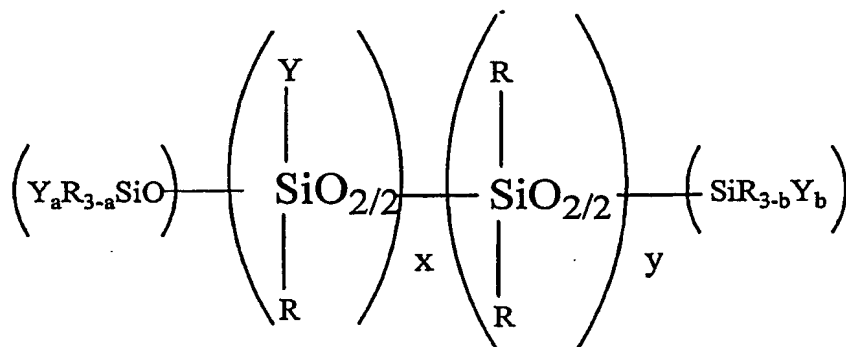
45. (New) The process as claimed in Claim 43, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

46. (New) The process as claimed in Claim 45, wherein the inert support is carbon black.

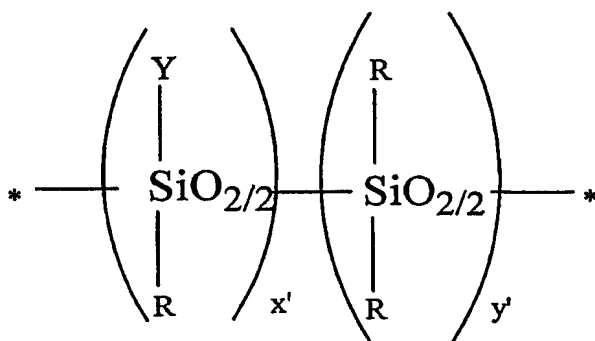
47. (New) The process as claimed in Claim 37, wherein the POSfs bearing functional units M' and/or D' and/or T' have the formula (IV.1), (IV.2) or (IV.3) below:



(IV.2):



(IV.3)



wherein:

Y and R are as defined in Claim 37;

a and b = 0 to 2;

 $0 \leq x \leq 200$; $0 \leq y \leq 200$;with the condition that if $x + y = 0$, then a and/or $b \neq 0$; $1 \leq x' \leq 10$; $0 \leq y' \leq 10$; and $3 \leq x' + y' \leq 10$.

48. (New) The process as claimed in Claim 47, wherein the inert support is carbon black.

49. (New) The process as claimed in Claim 47, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

50. (New) The process as claimed in Claim 49, wherein the inert support is carbon black.

51. (New) The process as claimed in Claim 47, wherein Y is hydrogen, alkenyl, alkynyl, aryl, (alkyl)epoxy, ether, polyether, carboxylic acid, amide, amine, halide, alcohol, or thiol or other sulfur derivative.

52. (New) The process as claimed in Claim 51, wherein the inert support is carbon black.

53. (New) The process as claimed in Claim 51, wherein the catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

54. (New) The process as claimed in Claim 53, wherein the inert support is carbon black.

55. (New) The process as claimed in Claim 13, comprising the following essential steps:

- (1) combining the starting POS resin, the POSf bearing functional units, the acid catalyst (I) and the nonbasic inert filler in an organic solvent;
- (2) reacting at a temperature θ r greater than or equal to room temperature and less than or equal to the boiling point of the solvent;
- (3) optionally quenching the reaction by adding an agent for neutralizing the acid catalyst (I); and
- (4) removing the inert filler from the reaction medium.

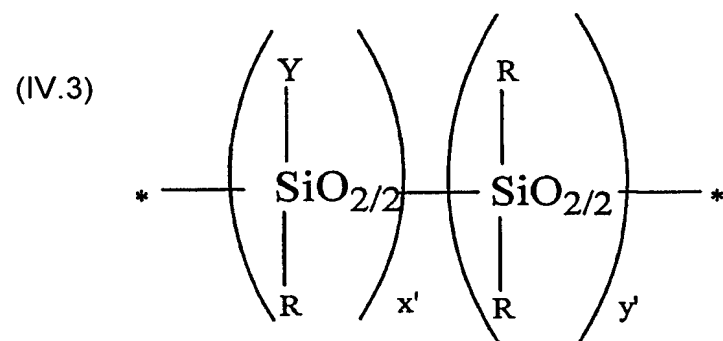
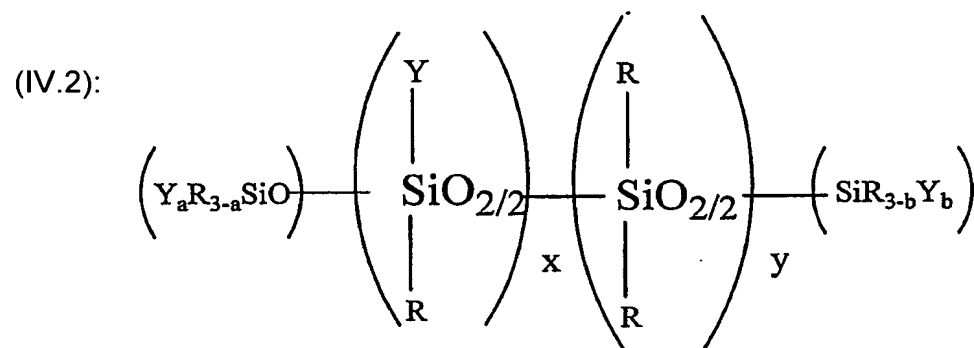
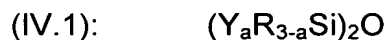
56. (New) The process as claimed in Claim 55, wherein the inert filler comprises carbon black, and/or wherein the reaction temperature is between 50°C and 100°C, and/or wherein the inert filler is removed from the reaction medium by filtration.

57. (New) The process as claimed in Claim 55, wherein the acid catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

58. (New) The process as claimed in Claim 57, wherein the inert filler comprises carbon black, and/or wherein the reaction temperature is between 50°C and 100°C, and/or wherein the inert filler is removed from the reaction medium by filtration.

59. (New) The process as claimed in Claim 55, wherein Y is hydrogen, alkenyl, alkynyl, aryl, (alkyl)epoxy, ether, polyether, carboxylic acid, amide, amine, halide, alcohol, or thiol or other sulfur derivative.

60. (New) The process as claimed in Claim 55, wherein the POSf bears functional units M' and/or D' and/or T' of the formula (IV.1), (IV.2) or (IV.3) below:



wherein:

Y and R are as defined in Claim 55;

a and b = 0 to 2;

$$0 \leq x \leq 200;$$

$$0 \leq y \leq 200;$$

with the condition that if $x + y = 0$, then a and/or $b \neq 0$;

$$1 \leq x' \leq 10;$$

$$0 \leq y' \leq 10; \text{ and}$$

$$3 \leq x' + y' \leq 10.$$

61. (New) The process as claimed in Claim 55, wherein the organic solvent is provided in the reaction medium by means of a solution of starting POS resin in said solvent, and wherein the nonbasic inert filler is in the form of powder dispersed in the POSf bearing functional units.

62. (New) The process as claimed in Claim 55, wherein the organic solvent is xylene or toluene, and/or wherein the nonbasic inert filler is carbon black.

63. (New) The process as claimed in Claim 13, wherein $Y = H$ or alkenyl in the functional units M' and/or D' and/or T' of the POSf, and wherein, after the redistribution, other functionalization radicals Y_1 bearing at least one unsaturation or at least one Si-H unit are grafted onto the $\equiv Si-H$ or $\equiv Si$ -alkenyl units, respectively, of the redistributed resin.

64. (New) The process as claimed in Claim 63, wherein other functionalization radicals Y_1 bearing at least one ethylenic unsaturation are grafted onto the $\equiv Si-H$ or $\equiv Si$ -alkenyl units, respectively, of the redistributed resin.

65. (New) The process as claimed in Claim 55, wherein Y = H or alkenyl in the functional units M' and/or D' and/or T' of the POSf, and wherein, after the redistribution, other functionalization radicals Y₁ bearing at least one unsaturation or at least one Si-H unit are grafted onto the ≡Si-H or ≡Si-alkenyl units, respectively, of the redistributed resin.

66. (New) The process as claimed in Claim 65, wherein other functionalization radicals Y₁ bearing at least one ethylenic unsaturation are grafted onto the ≡Si-H or ≡Si-alkenyl units, respectively, of the redistributed resin.

67. (New) The process as claimed in Claim 13, wherein the redistributed and functionalized resin obtained is subjected to at least one other redistribution/functionalization, using POSfs bearing functional units.

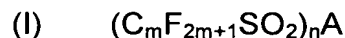
68. (New) The process as claimed in Claim 55, wherein the redistributed and functionalized resin obtained is subjected to at least one other redistribution/functionalization, using POSfs bearing functional units.

69. (New) The process as claimed in Claim 63, wherein the redistributed and functionalized resin obtained is subjected to at least one other redistribution/functionalization, using POSfs bearing functional units.

70. (New) The process as claimed in Claim 65, wherein the redistributed and functionalized resin obtained is subjected to at least one other redistribution/functionalization, using POSfs bearing functional units.

71. (New) A catalytic system comprising:

(A) at least one catalyst of formula (I) below:



wherein:

m is an integer greater than or equal to 1;

n is an integer equal to 1 or 2 and A represents OH, NH₂ or NH

with:

(i) n = 1 and A = OH;

(ii) n = 1 and A = NH₂ or NHR with R being a radical of SO₂-

Z type, with Z being a group other than C_mF_{2m+1}; or

(iii) n = 2 and A = NH;

and

(B) at least one nonbasic inert filler.

72. (New) The catalytic system as claimed in Claim 71, wherein the at least one nonbasic inert filler comprises carbon black, diatomaceous earth, or an acidic or neutral oxide, or a mixture thereof.

73. (New) The catalytic system as claimed in Claim 72, wherein the nonbasic inert filler is carbon black.

74. (New) The catalytic system as claimed in Claim 71, wherein the acid catalyst is triflic acid (TFOH) of formula (I) (i) with $m = 1$ and/or the trifluoromethanesulfonimide acid (TFSI) of formula (I) (iii) with $m = 1$.

75. (New) A catalytic system comprising:

(A) the catalyst triflic acid, having the formula $(\text{CF}_3\text{SO}_2)\text{OH}$, and/or trifluoromethanesulfonimide acid, having the formula $(\text{CF}_3\text{SO}_2)_2\text{NH}$; and

(B) carbon black.